

Estimated Sustainable Growth Rate and Conversion Factor, for Medicare Payments to Physicians in 2004

Section 211 of the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999 (BBRA) (Public Law 106-113) requires the Secretary to make available to the Medicare Payment Advisory Commission (MedPAC) and the public, an estimate of the Sustainable Growth Rate (SGR) and conversion factor applicable to Medicare payments for physicians' services for the following year and the data underlying these estimates. We are providing the estimates and information applicable to physician fee schedule payments in calendar year 2004. It is important to note that the SGR and conversion factor shown here are *estimated*—the actual values for 2004 will be based on later data and will be published in the *Federal Register* by November 1, 2003.

Medicare Sustainable Growth Rate

Section 1848(f) of the Social Security Act (the Act), as amended by section 4503 of the Balanced Budget Act of 1997 (BBA), enacted on August 5, 1997, replaced the Medicare Volume Performance Standard (MVPS) with a Sustainable Growth Rate (SGR) provision. Section 1848(f)(2) of the Act specifies the formula for establishing yearly SGR targets for physicians' services under Medicare. The use of SGR targets is intended to control the growth in aggregate Medicare expenditures for physicians' services.

The SGR targets are not direct limits on expenditures. Payments for services are not withheld if the SGR target is exceeded by actual expenditures. Rather, the fee schedule update, as specified in section 1848(d)(3) of the Act, is adjusted to reflect the comparison of actual expenditures to target expenditures. If expenditures exceed the target, the update is reduced. If expenditures are less than the target, the update is increased. Under the statute, the update for a year is determined by comparing cumulative actual expenditures to cumulative target expenditures (referred to as "allowed expenditures" in the statute) from April 1, 1996 through the end of the year preceding the year at issue. For instance, the 2004 update will reflect a comparison of cumulative actual to cumulative target expenditures from April 1, 1996 through December 31, 2003. Target expenditures for each year are equal to target expenditures from the previous year increased by the SGR (which is a percentage figure computed by combining four factors specified below).

The statute specifies a formula to calculate the SGR based on our estimate of the change in each of four factors. The four factors for calculating the SGR are as follows:

- (1) The estimated percentage change in fees for physicians' services.
- (2) The estimated change in the average number of Medicare fee-for-service beneficiaries.
- (3) The estimated projected growth in real gross domestic product (GDP) per capita.
- (4) The estimated change in expenditures due to changes in law or regulations.

The BBRA amended section 1848(d)(1)(E) of the Act to require that we make available to the Medicare Payment Advisory Commission (MedPAC) and the public, estimates of the sustainable growth rate and of the conversion factor that will apply to physicians' services for the succeeding year and the data used in making this estimate. We are sending this information to MedPAC and making it available to the public on this web page with additional related information.

The BBRA of 1999 amended section 1848(d)(1)(E) of the Act to require publication in the *Federal Register* no later than November 1 of each year (beginning with 2000) of the actual conversion factor, update and allowed expenditures that will apply to physicians' services for the succeeding year. Another section of the law (section 1848(f)(1)) requires that we publish in the *Federal Register* no later than November 1 of each year, using the best available data as of September 1, the SGR for the following year, the contemporaneous year, and the preceding year. By November 1, 2003, we are required to publish, based on the best data available to us as of September 1, 2003, the SGR for CY 2002, CY 2003, and CY 2004. We plan to implement these provisions as part of the physician fee schedule final rule that we publish by November 1 of the year before it is applicable. Thus, in this document, we are providing (i) our current estimates (as of March 1, 2003) of the SGRs for CY 2002, CY 2003, and CY 2004, (ii) our current estimates of allowed expenditures under the SGR system through the end of 2004, and (iii) our current estimate of the physician fee schedule update for 2004. We will be providing updates of all of this information using

more recent data by November 1, 2003. The updated values published by November 1, 2003 will be used to determine the actual update for physician payments in CY 2004.

Table 1 shows our current estimates of the aforementioned SGRs.

Table 1. Current Estimates of SGRs for CY 2002, CY 2003, and CY 2004

	CY 2002	CY 2003	CY 2004
Factor 1: Increase in Fees	2.5%	3.0%	2.3%
Factor 2: Increase in Enrollment	3.2%	1.7%	1.3%
Factor 3: Increase in Real Per Capita GDP	1.5%	2.0%	2.7%
Factor 4: Increase due to changes in Law or Regulations	1.1%	0.0%	0.0%
Total Sustainable Growth Rate	8.5%	6.8%	6.4%

Our March 1 estimates of the SGRs provided in Table 1 are early estimates only and may change based on later information. The later figures will be included in the physician fee schedule final rule that will be published in the *Federal Register* by November 1. While they are the best estimates at the time, the figures we specify later in the year are likely to differ from our current estimates for several reasons, particularly with respect to the SGR estimates for the following year.

We will have more complete data on the four factors that comprise the SGR formula (as of September 1 of a year) for publication in the November 1st notice than are available by March 1. For example, for the 2004 SGR estimate made as of March 2003, we must estimate the percent change in fee-for-service enrollment for 2004 although we have little information on the change in fee-for-service enrollment for 2003. Similarly, an estimate of the percent change in real GDP per capita for 2003 made by November 1, 2003 is likely to be better than an estimate made by March 1, 2003. In addition, an estimate of the changes in law and regulation affecting expenditures for physicians' services for 2004 requires an estimate of the financial impact of any policy changes several months before the physician fee schedule proposed rule is published. For these reasons, the readers should carefully consider the inherent limitations of these estimates and be aware that the subsequent values announced in November will likely be at least somewhat different.

We also point out that there may be differences between an SGR for a year specified by November 1 and the SGR for the same year as subsequently revised based on later data. Section 211 of the BBRA authorizes the adjustment of prior years' SGR component factors, to reflect later data, beginning with the SGR for FY 2000. The two SGR elements that have exhibited the most volatility have been the fee-for-service enrollment numbers and real gross domestic product per capita.¹ With data on these factors during the year after March 1, interested persons could make estimates of the SGR and the performance adjustment to the physician update for a year.

The MVPS/SGR targets for periods prior to CY 2002 are considered to be final and are listed in Table 2 below. The Consolidated Appropriations Resolution, 2003, Public Law 108-7, enacted on February 20, 2003 permitted prospective application of revisions to the FY 1998 and FY 1999 SGRs for the CY 2003 physician fee schedule update. This provision was effective March 1, 2003, and the revised values for these years are reflected in Table 2. The MVPS applied for FY 1990 through FY 1997. The SGR applied beginning with FY 1998. Figures reflect a weighted average MVPS for FY 1991 through FY 1993 when there were two different MVPSS (one for surgical services, and one for all other services) and for FY 1994 through FY 1997 when there were three different MVPSS (for surgical services, primary care services, and all other services).

¹ We note that more recent data on these two elements are available during a year on several web sites. The latest measurements of real GDP for a quarter are available from the home page for the Bureau of Economic Analysis of the Department of Commerce (www.bea.doc.gov). Population figures are available from the home page for the Census Bureau (www.census.gov). Real GDP per capita can be calculated from these figures. In addition, monthly Medicare+Choice enrollments are currently available on the CMS Home page (www.cms.hhs.gov/healthplans/statistics/mmcc/). By April of each year, when our Office of the Actuary puts the Trustees Report on the CMS Home page, we will also post the projections of total Medicare Part B enrollment for the current and subsequent calendar years, as well as for the preceding calendar year, consistent with the Trustees Report. Thus, Medicare fee-for-service enrollment could be determined.

Table 2 Physician MVPS / SGR

Year	Physician MVPS / SGR
FY 1990	9.1%
FY 1991	7.3%
FY 1992	10.0%
FY 1993	10.0%
FY 1994	9.4%
FY 1995	7.5%
FY 1996	1.8%
FY 1997	-0.3%
FY 1998	3.2%
FY 1999	4.2%
FY 2000	6.9%
CY 2000	7.3%
CY 2001	4.5%

Allowed Expenditures for Physicians' Services

Section 1848(d)(3)(C) of the Act defines allowed expenditures for the period April 1, 1996 through March 31, 1997 to be equal to actual expenditures for physicians' services during that period. Annual allowed expenditures for subsequent periods are equal to annual expenditures for the previous year increased by the SGR. The SGR was determined on a fiscal year basis through FY 1999. Beginning with CY 2000, the SGR is determined on a calendar year basis. The BBRA provides for a transition from a fiscal year to a calendar year SGR system in 1999. We have described this transition in a *Federal Register* notice published in April 10, 2000.

Table 3 shows quarterly allowed expenditures and cumulative allowed expenditures for the period from April 1, 1996 through December 31, 2004. The table shows quarterly allowed expenditures for physicians' services to reflect any seasonality, which may occur in expenditures for physicians' services over a year. For instance, there is a different figure for quarterly allowed expenditures for the four quarters included in the April 1, 1996 to March 31, 1997 base period. We provide more information below on how quarterly figures are combined to determine allowed expenditures for a year.

Table 3. Summary of Allowed Expenditures for Physicians' Services¹

Quarter	Applicable SGR	Quarterly Allowed Expenditures ² [in billions]	Cumulative Allowed Expenditures ³ [in billions]
2Q1996		\$12.4	\$12.4
3Q1996		\$12.0	\$24.3
4Q1996		\$12.2	\$36.6
1Q1997		\$12.3	\$48.9
2Q1997	3.2%	\$12.7	\$61.7
3Q1997	3.2%	\$12.4	\$74.0
4Q1997	3.2%	\$12.6	\$86.7
1Q1998	3.2%	\$12.7	\$99.4
2Q1998	4.2%	\$13.3	\$112.7
3Q1998	4.2%	\$12.9	\$125.6
4Q1998	4.2%	\$13.2	\$138.7
1Q1999	4.2%	\$13.3	\$152.0
2Q1999	6.9%	\$14.2	\$166.2
3Q1999	6.9%	\$13.8	\$180.0
4Q1999	6.9%	\$14.1	\$194.0
1Q2000	7.3%	\$14.2	\$208.3
2Q2000	7.3%	\$15.2	\$223.5
3Q2000	7.3%	\$14.8	\$238.3
4Q2000	7.3%	\$15.1	\$253.4
1Q2001	4.5%	\$14.9	\$268.3
2Q2001	4.5%	\$15.9	\$284.2
3Q2001	4.5%	\$15.4	\$299.6
4Q2001	4.5%	\$15.8	\$315.4
1Q2002	8.5%	\$16.1	\$331.5
2Q2002	8.5%	\$17.3	\$348.8
3Q2002	8.5%	\$16.8	\$365.6
4Q2002	8.5%	\$17.1	\$382.7
1Q2003	6.8%	\$17.2	\$399.9
2Q2003	6.8%	\$18.5	\$418.4
3Q2003	6.8%	\$17.9	\$436.3
4Q2003	6.8%	\$18.3	\$454.6
1Q2004	6.4%	\$18.3	\$472.9
2Q2004	6.4%	\$19.6	\$492.5
3Q2004	6.4%	\$19.0	\$511.6
4Q2004	6.4%	\$19.5	\$531.0

¹As explained above, the law requires revisions of SGRs beginning with the CY 2002 SGR. The 2002 figures (based on the CY 2002 SGR), the 2003 figures (based on the CY 2003 SGR), and the 2004 figures (based on the 2004 SGR) are estimated and may change based on more recent information which affects these SGRs.

²Allowed expenditures for a quarter (such as 4Q2004) are equal to allowed expenditures for the same quarter in the previous year (4Q2003 in this example) increased by the SGR for the year in which that quarter occurs (in this case, 6.4 percent). For example, quarterly allowed expenditures of \$19.5 billion in 4Q2004 are equal to quarterly allowed expenditures of roughly \$18.3 billion (4Q2003) increased by the SGR of 6.4 percent (\$19.5 billion = \$18.3 billion x 1.064).

³Cumulative allowed expenditures for a quarter (such as 4Q 2004) are equal to the sum of cumulative allowed expenditures from the previous quarter for the same year (3Q2004) and quarterly allowed expenditures for that quarter. For example, cumulative allowed expenditures in 4Q2004 of \$531.0 billion are equal to the sum of cumulative allowed expenditures through 3Q2004 of \$511.6 billion and estimated allowed expenditures in 4Q2004 of \$19.5 billion (\$531.0 billion = \$511.6 billion + \$19.5 billion).

Note: Totals do not necessarily equal the sum of rounded components.

Actual Expenditures for Physicians' Services

Table 4 shows, on a quarterly basis from April 1, 1996 through December 31, 2002, actual expenditures and cumulative actual expenditures for the period. These expenditures represent reimbursement amounts tabulated by the quarter in which the service was furnished. Since there is a lag between the date that the service is furnished and the date that the payment is made, the most recent quarters depict incomplete data. The total reimbursement amounts for these quarters are estimated by approximating the level of completeness of the data. This approximation is determined using historical trends. We will update these amounts periodically when we have reasonably complete data (approximately 6 months after the end of a quarter). As we have described above, we are showing actual expenditures on a quarterly basis to reflect any seasonal variation in expenditures that occurs over the year.

Table 4. Summary of Actual Expenditures under the SGR

Calendar Quarter	Benefits Processed thru 12/31/01 [in billions]	Approximate Completeness	Estimated Total Expenditures ¹ [in billions]	Cumulative Total Expenditures ¹ [in billions]
2Q1996	\$12.4	100.0%	\$12.4	\$12.4
3Q1996	\$12.0	100.0%	\$12.0	\$24.3
4Q1996	\$12.2	100.0%	\$12.2	\$36.6
1Q1997	\$12.3	100.0%	\$12.3	\$48.9
2Q1997	\$12.6	100.0%	\$12.6	\$61.5
3Q1997	\$12.2	100.0%	\$12.2	\$73.6
4Q1997	\$12.2	100.0%	\$12.2	\$85.8
1Q1998	\$12.5	100.0%	\$12.5	\$98.4
2Q1998	\$12.6	100.0%	\$12.6	\$111.0
3Q1998	\$12.3	100.0%	\$12.3	\$123.3
4Q1998	\$12.5	100.0%	\$12.5	\$135.8
1Q1999	\$13.1	100.0%	\$13.1	\$148.9
2Q1999	\$13.3	100.0%	\$13.3	\$162.2
3Q1999	\$13.0	100.0%	\$13.0	\$175.2
4Q1999	\$13.2	100.0%	\$13.2	\$188.4
1Q2000	\$14.5	100.0%	\$14.5	\$202.9
2Q2000	\$14.6	100.0%	\$14.6	\$217.5
3Q2000	\$14.4	100.0%	\$14.4	\$232.0
4Q2000	\$14.6	100.0%	\$14.6	\$246.5
1Q2001	\$16.3	99.9%	\$16.3	\$262.8
2Q2001	\$16.7	99.8%	\$16.7	\$279.5
3Q2001	\$16.3	99.7%	\$16.4	\$295.9
4Q2001	\$16.8	99.2%	\$17.0	\$312.9
1Q2002	\$16.9	98.5%	\$17.2	\$330.1
2Q2002	\$17.5	97.2%	\$18.0	\$348.0
3Q2002	\$16.9	94.6%	\$17.9	\$365.9
4Q2002	\$12.2	69.0%	\$17.8	\$383.6

¹Estimated and cumulative total expenditures are less likely to change as the approximate completeness approaches 100 percent.

Note: Totals do not necessarily equal the sum of rounded components.

CY 2004 Physician Fee Schedule Update and Conversion Factor

The physician fee schedule conversion factor is updated each year by the percentage change in the Medicare Economic Index (MEI), which measures the weighted average price change for various inputs involved with producing physicians' services. The fee schedule update is adjusted by a performance adjustment factor that compares actual and target expenditures. The performance adjustment factor for a given year is determined by a statutory formula, as shown below.

For the 2004 physician fee schedule update, the law requires that the performance adjustment factor (PAF) be calculated using the following formula:

$$PAF_{2004} = \frac{Target_{2003} - Actual_{2003}}{Actual_{2003}} \times 0.75 + \frac{Target_{4/96-12/03} - Actual_{4/96-12/03}}{Actual_{2003} \times (1 + SGR_{2004})} \times 0.33$$

Substituting the estimated figures from tables 1, 3, and 4, as well as our current projections of actual expenditures for CY 2003 (summarized below) in this formula produces our current estimate of the PAF for 2004:

Target₀₃ = Estimated Allowed Expenditures for CY 2003 = \$71.9 billion (\$17.2 + \$18.5 + \$17.9 + \$18.3)

Actual₀₃ = Estimated Actual Expenditures for CY 2003 = \$75.8 billion

Target_{4/96-12/03} = Estimated Cumulative Allowed Expenditures from 4/1/96 - 12/31/03 = \$454.6 billion

Actual_{4/96-12/03} = Estimated Cumulative Actual Expenditures from 4/1/96 - 12/31/03 = \$459.5 billion

SGR₂₀₀₄ = Estimated Sustainable Growth Rate for 2004 = 6.4 percent or 0.064

$$PAF_{2004} = \frac{71.9 - 75.8}{75.8} \times 0.75 + \frac{454.6 - 459.5}{75.8 \times 1.064} \times 0.33 = -0.059 = -5.9\%$$

The current estimate of the performance adjustment factor for 2004 is thus -5.9%.

The performance adjustment factor for 2004 may be even more difficult to estimate by March 1 than the 2004 SGR. By March 1 of each year we will have no actual data on several of the key elements that comprise the formula for updating the conversion factor for the next year. For example, by March 1, 2003, we will have no data on actual expenditures for physicians' services under the SGR for CY 2002 since we receive expenditure information on a quarterly basis during the year, with a lag time after the quarter closes. In addition, the formula depends on the SGR estimate, which is also subject to change, as noted earlier. Therefore, by March 1 of each year, we will only have estimates of the three data elements required to determine the performance adjustment to the physician fee schedule update (actual expenditures for physicians' services for the current year, allowed expenditures through the end of the current year, and the SGR for the next year). See Appendix I for a quantitative analysis of this uncertainty.

The estimated physician fee schedule update for CY 2004 is determined by multiplying (i) the estimated MEI, (ii) the estimated performance adjustment factor, and (iii) any other applicable factors as shown in table 5 ($0.958 = 1.020 \times 0.941 \times 0.998$). This increase, when applied to the CY 2003 conversion factor of \$36.7856, produces an estimated conversion factor for CY 2004 of \$35.2406.

Table 5. Current Estimate of the CY 2004 Physician Conversion Factor

CY 2003 Conversion Factor	\$36.7856
MEI	2.0% (1.020)
Performance Adjustment	-5.9% (0.941)
Other Factors ¹	-0.2% (0.998)
Total Increase	-4.2% (0.958)
Estimated CY 2004 Conversion Factor	\$35.2406

¹Section 1848(d)(4)(F) requires an adjustment to the conversion factor of -0.2 percent in 2001–2004 and +0.8 percent in 2005.

Table 6 lists the historical MEI and physician updates from 1992 through 2003. The physician update reflects a weighted average for 1993 when there were two different updates (one for surgery and one for other services). The physician update reflects a weighted average for 1994 through 1998 when there were three different updates (for surgery, primary care, and other services). There is an additional adjustment for budget neutrality (the volume and intensity offset) that is not incorporated into the physician fee schedule update figures shown in the table. We have provided a more detailed description of this adjustment and its magnitude in physician fee schedule final rules published in the *Federal Register* on or about November 1 of each year.

Table 6. Actual Past Medicare Economic Index Increases and Physician Updates for 1992-2003, and Estimated Values for 2004

Year	Physician Medicare Economic Index Increase	Physician Update
Actual:		
1992	3.2%	1.9%
1993	2.7%	1.4%
1994	2.3%	7.0%
1995	2.1%	7.5%
1996	2.0%	0.8%
1997	2.0%	0.6%
1998	2.2%	2.3%
1999	2.3%	2.3%
2000	2.4%	5.5%
2001	2.1%	5.0%
2002	2.6%	-4.8%
2003	3.0%	1.7%
Estimated:		
2004	2.0%	-4.2%
<u>Average Annual</u>		
1992-2004	2.4%	2.0%
1998-2004	2.4%	1.0%
<u>Cumulative</u>		
1992-2004	35.7%	29.2%

Note: The update of 1.7% for 2003 was effective on March 1, 2003; therefore the average update for that year was 1.4%.

Questions on the information presented here may be addressed to:

Office of the Actuary
N3-01-21
Centers for Medicare & Medicaid Services
Baltimore, MD 21244
or
[dmmce@cms.hhs.gov]

Office of the Actuary
Centers for Medicare & Medicaid Services
March 21, 2003

Appendix I

Assessment of the Uncertainty in the CY 2004 Physician Fee Schedule Update

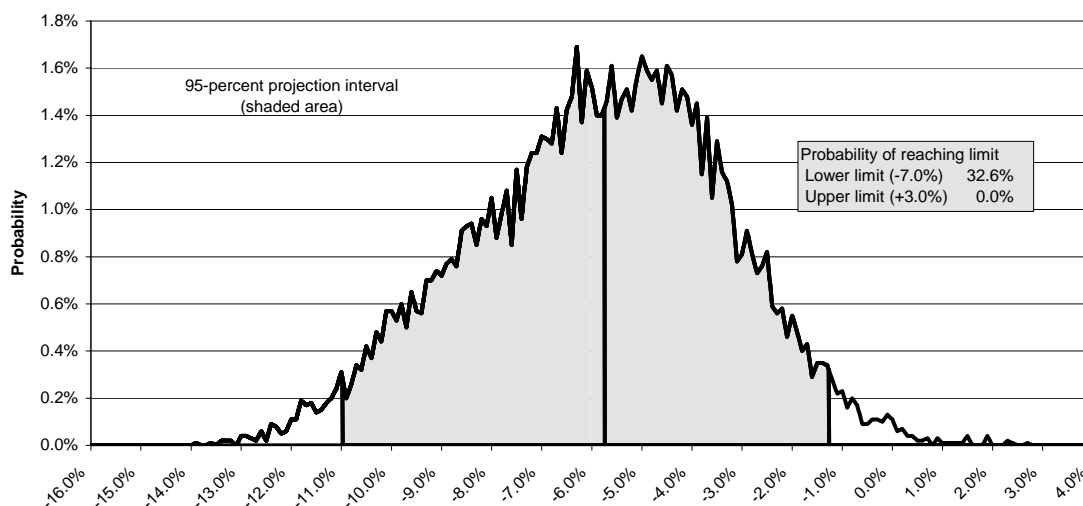
The preceding calculations are based on our best estimates. As we alluded to earlier, these estimates are subject to a great deal of uncertainty. The following analysis uses statistical techniques to help quantify a likely range for the CY 2004 performance adjustment factor and the CY 2004 physician fee schedule update. The statistical methods employed here (also referred to as “stochastic” projection techniques) measure past variation in certain variables and assume that similar variation will occur in the future.

The performance adjustment factor for 2004 is based on a comparison of actual and target expenditures through 2003. Several of the factors that affect both the actual and target expenditures, affect both in a similar way and, therefore, will have no impact on the comparison of the two. The only two factors that affect the comparison are the real GDP per capita and the growth in the volume and intensity of physician services. As a result, this analysis will focus on the variability of the real GDP per capita estimates on target expenditures and the variability in the growth in the volume and intensity of physician services delivered on the actual expenditures.

Past variations of real GDP per capita and the volume and intensity of physician services were used to estimate the variability in the projected values, relative to the best estimates. There was no evidence of correlation between these two variables, therefore they were assumed to be independent. The estimates of real GDP per capita and the volume and intensity of physician services for 2002 are based largely on historical data. Consequently the variation for these factors in 2002 was reduced accordingly.

Individual scenarios are generated by randomly selecting the 2002 and 2003 growth rates for both real GDP per capita and the volume and intensity of physician services from a frequency distribution given their estimated variability. Ten-thousand scenarios were generated, and a frequency distribution of the resulting performance adjustments is shown in figure 1. The statutory limits of –7.0 percent and 3.0 percent were not applied for illustrative purposes. The results indicate that 95 percent of the time the 2004 performance adjustment can be expected to fall between –11.0 percent and -1.3 percent.

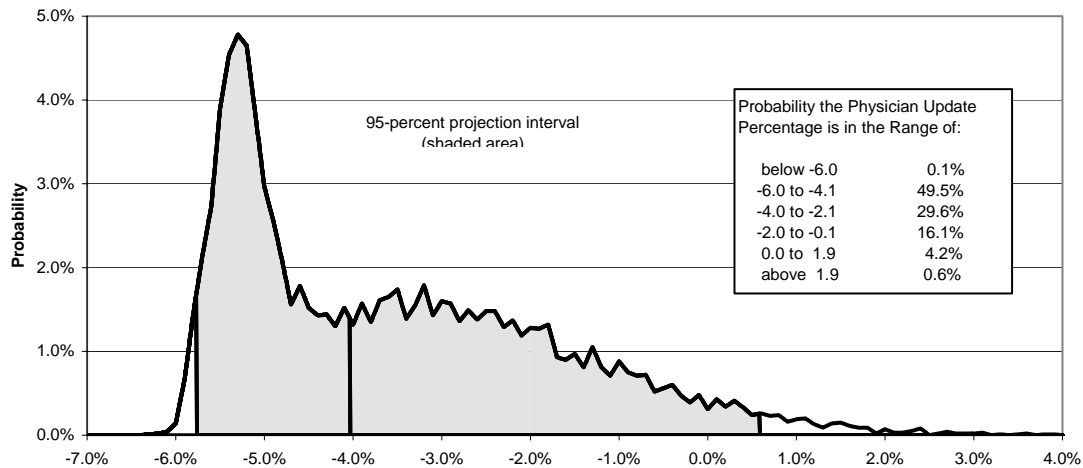
Figure 1. Frequency Distribution of the Performance Adjustment for CY 2004



The stochastic model was also used to assess the uncertainty of the physician fee schedule update for CY 2004. The CY 2004 update includes the increase in the MEI, the performance adjustment (between –7.0 percent and 3.0 percent), and a legislated reduction of 0.2 percent. Therefore, for this analysis, the MEI was also varied in a method similar to the one applied to real GDP per capita and the volume and intensity of physician services. The frequency

distribution of the CY 2004 physician fee schedule updates is shown in figure 2. The results indicate that 95 percent of the time the 2004 physician fee schedule update can be expected to fall between -5.8 percent and 0.6 percent. The large spike in the distribution around -5.0 percent is due to the performance adjustment being limited to -7.0 percent in a large number of simulated trials.

Figure 2. Frequency Distribution of the Physician Payment Update for CY 2004



The stochastic approach is beneficial because it provides an estimated probability of occurrence of various possible outcomes. However, there are several things to keep in mind when using this model. First, the stochastic technique relies heavily on past experience. The future may differ from the past in fundamental ways that cannot be anticipated, or reflected in a statistical model. Second, the model is based on current law and does not account for any legislated changes that could occur before the final CY 2004 physician update is determined in November. Finally, the growth in the MEI and real GDP per capita are assumed to be independent for the simulations. There is some evidence based on a limited data set that these two variables may be negatively correlated. Further study will be needed to draw any firm conclusions.

The rather large ranges shown here for both the performance adjustment and the physician update for 2004 clearly demonstrate the uncertainty involved in making these estimates. The readers should carefully consider the inherent limitations of these estimates and be aware that the values announced in November will likely be at least somewhat different from those estimated here.